

ROYAL GARDENS, KEW.

BULLETIN

OF

MISCELLANEOUS INFORMATION.

No. 51.]

MARCH.

[1891.]

CXCII.—COTTON IN WEST AFRICA.

In the *Kew Bulletin* for June 1890 an account is given of the attempt which has been made to improve the produce of cotton in West Africa by introducing the best forms of Egyptian cotton. "This cotton has many advantages in length, strength, and fineness of fibre over that grown in America, and commands a much higher price; at present its production is limited to the Nile valley, where there is no room for extension to meet the increasing demand, and where the crop is at times almost ruined by a low Nile."

The present correspondence relates to the experimental cultivation of Egyptian cotton on the Gold Coast.

CURATOR, BOTANICAL STATION, ABURI, to ROYAL GARDENS, KEW

[Extract.]

Botanical Station, Aburi,
Gold Coast, West Africa,

November 11, 1890.

SIR,

I AM directed by his Excellency to inform you that he is sending to Kew a sample of the Egyptian cotton grown at Aburi. I beg to state that I planted an acre of this cotton. It has grown remarkably well, and is yielding a good crop. I have already gathered a large quantity, and there is still a quantity not yet ready for gathering.

I am, &c.

The Assistant Director,
Royal Gardens, Kew.

(Signed) W. CROWTHER.

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1891.

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ROYAL GARDENS, KEW, to GOVERNOR, GOLD COAST COLONY.

SIR, Royal Gardens, Kew, December 23, 1890.

I HAVE the honour to acknowledge the receipt of a sample of Egyptian cotton which I learn from a letter from Mr. Crowther, Curator of the Botanical Station at Aburi, was grown by him there. This was no doubt raised from seed obtained by Kew early in the present year from the British Commissioner of the Egyptian State Domains.

2. This sample was submitted to the Manchester Chamber of Commerce, and I have now the pleasure of forwarding you a copy of their report.

3. I find that a sample of cotton from Elmina was received at this establishment in 1882 from the Colonial Office. It was reported upon as having for its chief fault "the large proportion of short inferior wool."

4. I trust that the station will possess in the new strain of Egyptian cotton a staple free from this defect, and will be able to promote its growth throughout the Colony.

I am, &c.

(Signed) W. T. THISELTON DYER.

His Excellency

Sir W. Brandford Griffith, K.C.M.G.,
Governor, &c., Gold Coast.

CHAMBER OF COMMERCE, MANCHESTER, to ROYAL GARDENS, KEW.

Chamber of Commerce, Manchester,
December 11, 1890.

DEAR SIR,

I THANK you for your letter of the 10th instant, and for the sample of cotton named therein, which has come to hand. This will be submitted to the Board of Directors in accordance with your request, and I hope to forward a report upon them in the course of a few days.

Yours, &c.

(Signed) ELIJAH HELM,
Secretary.

CHAMBER OF COMMERCE, MANCHESTER, to ROYAL GARDENS, KEW.

Chamber of Commerce, Manchester,
December 20, 1890.

DEAR SIR,

I HAVE now the pleasure to report to you upon the sample of Egyptian cotton grown at Aburi, on the Gold Coast, forwarded to me on the 10th instant.

This cotton is worth to-day about $5\frac{1}{2}d.$ per pound in Liverpool or Manchester, and at that price it would find a ready sale. The growth of it should be encouraged. Can you tell me whether or not the Gold Coast Egyptian cotton represented by your sample is imported in the ginned or unginned state? I am informed by a gentleman who used to bring this description to England that he could not get it ginned in Africa, because the natives were either not sufficiently intelligent or too superstitious to use a ginning machine, although this is of the simplest description, resembling very closely an ordinary hay-cutter. It is to be feared that if this difficulty still exists it will constitute a formidable, if not an insurmountable, obstacle to the export of this cotton from the Gold Coast.

Yours, &c.

(Signed) ELIJAH HELM,
Secretary.

COLONIAL OFFICE to ROYAL GARDENS, KEW.

SIR,

Downing Street, December 16, 1890.

I AM directed by Lord Knutsford to transmit to you some specimens of Egyptian cotton, cleaned of seeds and uncleaned, grown on the Castle Farm, Christiansborg, Accra, which have been sent home by the Governor of the Gold Coast Colony. He states that the seed was planted at the end of June, and the cotton picked between the 5th and 14th November.

Lord Knutsford would be much obliged if you could furnish him with a report on the commercial value of these specimens.

I am, &c.

The Director,
Royal Gardens, Kew.

(Signed) R. H. MEADE.

ROYAL GARDENS, KEW, to COLONIAL OFFICE.

SIR,

Royal Gardens, Kew, February 9, 1891.

I HAVE the honour to acknowledge the receipt of your letter of December 16, transmitting a report on a sample of Egyptian cotton, grown on the Castle Farm Christiansborg, Accra, and sent home by the Governor of the Gold Coast Colony.

2. In accordance with Lord Knutsford's wish the enclosed report upon the sample has been obtained from the Manchester Chamber of Commerce, which has very obligingly assisted this establishment on this and other occasions.

3. From the correspondence published in the *Kew Bulletin* for June 1890 you will observe that the production of this type of cotton if successful in West Africa may be made the basis of a very profitable industry. You will, therefore, no doubt also observe with satisfaction that the present sample is reported upon in very favourable terms. The estimated value is the highest which has been put upon any sample of cotton yet received from West Africa.

I am, &c.

(Signed) W. T. THISELTON DYER.

The Hon. R. H. Meade, C.B.

CHAMBER OF COMMERCE, MANCHESTER, to ROYAL GARDENS, KEW.

Chamber of Commerce, Manchester,

DEAR SIR,

February 4, 1891.

I HAVE pleasure in reporting to you upon the sample of Egyptian cotton, ginned and unginned, grown at Castle Farm, Christiansborg, Accra, forwarded by you on the 19th December. It has been submitted to the judgment of experts, members of this Chamber, and is described as good, clean, and very desirable cotton, worth to-day about 6½d. per pound in Liverpool. Can you inform me whether the sample was ginned in Africa or in this country?

Yours, &c.

(Signed) ELIZAH HELM,
Secretary.

CXCIII.—LIST OF ORCHIDS FLOWERED AT KEW IN 1890.

Since 1887 a record has been kept of the Orchids which have flowered each year at Kew. The list for last year, 1890, does not materially differ from those of previous years, but it is published as affording data as to the time and duration of the flowering period of Orchids cultivated in England. It enumerates 766 species and varieties.

The Kew collection of Orchids differs in character as well as in extent from all other collections, except those of similar establishments. No attempt is made to give prominence to the most showy flowered by the cultivation of a large number of examples. On the other hand, every effort is made to obtain and cultivate even small and unattractive kinds of scientific interest, such as the ordinary collector would consider beneath his notice. In the limited space available for Orchids as comprehensive a collection of species as possible is aimed at. Consequently, whilst there is never a great display of Orchid flowers at Kew, at no time of the year is the collection wanting in flower interest. Thus, whilst the highest number of species flowered in any one month was 125 in May, the lowest was 85 in January. The average for each month was a fraction over one hundred.

A few words on the growth of the Kew collection of Orchids may be interesting. In 1811 the number of species in cultivation at Kew was only 37. It was not until some thirty years after this that efforts were made to obtain a representative collection of these plants, which at that time had begun to attract the attention of horticulturists generally. Soon after Sir William Hooker's appointment as Director in 1841, he made arrangements with the Messrs. Loddiges, of Hackney, at that time the most celebrated of European nurserymen, to supply Kew with 200 species of Orchids for 50*l*.

The collection of Orchids formed by the Rev. J. Clowes, of Broughton Hall, near Manchester, was bequeathed by him to Kew, whither it was transferred in 1846. Liberal gifts of Orchids were made about the same time by the Duke of Bedford and others. Exchanges were also made with growers of Orchids, and collectors were instructed to send home living plants of this family, until by the year 1850 the collection at Kew had increased to 830 species. From some cause or other the number fell again to 638 species in 1864, but by 1880 it had again risen to about 950 species. At the present time (Jan. 1891) there are in cultivation at Kew 1,342 species, comprised in 158 genera. These figures do not include 174 varieties and over 100 undetermined plants. The collection is kept up by means of exchange and a small outlay, about 20*l*. annually, for plants which can only be obtained by purchase.

Some of the most noteworthy amongst the genera represented in the following tables are:—*Dendrobium*, of which 69 species flowered last year; *Masdevallia*, 53 species; *Calogyne*, 31 species; *Oncidium*, 40 species; *Odontoglossum*, 28 species; *Cattleya*, 24 species; and *Cypripedium*, 38 species (exclusive of hybrids). Amongst smaller or less known genera may be noted:—*Angræcum*, 17 species; *Bulbophyllum*, 19 species; *Catasetum*, 9 species; *Pleurothallis*, 20 species; and *Phalænopsis*, 12 species.

The flowering period of many Orchids extends over a considerable portion of the year, some, such as, for instance—*Cypripedium longifolium*, *Masdevallia pulvinaris*, and *Odontoglossum crispum*, which were in flower all through the year.

[illegible]

[illegible]

[illegible]

		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<i>Calanthe—cont.</i>													
vestita var. rubro oculata.	Burma - -	-									×	×	×
— var. Sedeni -	- - -	-										×	×
striata - -	Japan - -	-		×	×								
<i>Calypso:</i>													
borealis - -	North America -					×							
<i>Catasetum:</i>													
barbatum -	Demerara - -	-											×
darwinianum -	British Guiana -	-							×	×	×		
discolor - -	Brazil - -	-								×	×	×	×
garnettianum -	" - -	-		×	×							×	×
Gnomus - -	" - -	-		×								×	
longifolium -	Demerara - -	-										×	
macrocarpum -	Tropical America -	-								×	×	×	×
Naso - -	Caracas - -	-						×					
russellianum -	Guatemala -	-							×	×			
<i>Cattleya:</i>													
bowringiana -	Brit. Honduras -	-								×	×		
citrina - -	Mexico - -	-		×	×								
dowiana - -	Costa Rica - -	-							×	×			
— var. aurea -	Colombia - -	-							×	×			
Eldorado - -	Central America -	-								×	×		
Forbesii - -	Brazil - -	-					×				×		
gaskelliana -	" - -	-					×	×	×				
Gigas - -	Tropical America	-					×						
guttata - -	Brazil - -	-											
— var. Prinzii -	" - -	-		×									
intermedia -	" - -	-			×								
lawrenceana -	British Guiana -	-		×	×								
lindleyana -	Bahia - -	-	×										
Loddigesii -	Brazil - -	-					×						
— var. harrison- iana violacea.	" - -	-								×			
luteola - -	" - -	-	×										×
maxima - -	Tropical America	-											
— var. peruviana	" "	-									×	×	
Mendellii -	Colombia - -	-			×	×	×						
Mossiae - -	Venezuela -	-			×	×							
percivaliana -	Brazil - -	-	×	×									
porphyrophlebia	Garden Hybrid	-							×				

[illegible]

[illegible]

		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Cyperorchis :													
elegans -	India -										x	x	x
Cypripedium :													
Argus -	Philippines -		x	x									
barbatum -	Tropical Asia -				x	x							
— var. biflorum -	Mount Ophir -										x	x	x
bellatulum -	Tropical Asia -		x	x							x	x	x
Boxalli -	" " -	x	x										x
bullenianum -	Borneo -												x
— var. anophthalmum.	" -					x							
callosum -	Cochin China -										x	x	x
calurum -	Garden Hybrid -							x	x	x	x	x	x
cardinale -	" " -						x	x	x	x	x	x	x
caudatum -	Peru -				x	x							
ciliolare -	Malay Arch. -				x	x							
conchiferum -	Garden Hybrid -	x	x	x	x	x	x	x	x	x	x	x	x
concolor -	Moulmein -	x	x										
— var. Regnieri -	Cambodia -					x	x						
Curtisii -	Philippines -						x	x	x				
Dauthieri -	Garden Hybrid -											x	x
dayanum -	Borneo -					x	x						
dominianum -	Garden Hybrid -	x	x										x
Godefroyæ -	Siam -						x	x					
harrisianum -	Garden Hybrid -								x	x			
hirsutissimum -	Java -			x	x								
Hookeræ -	Borneo -					x	x						
insigne -	Nepal -	x									x	x	x
— var. Maulei -	India -	x									x	x	x
Io -	Garden Hybrid -								x	x	x		
javanicum -	Java -										x	x	
klotzschianum -	British Guiana -										x	x	x
lawrencianum -	Borneo -				x	x	x						
leanum -	Garden Hybrid -	x											x
lindleyanum -	New Granada -												x
longifolium -	Central America -	x	x	x	x	x	x	x	x	x	x	x	x
Lindeni -	Colombia -					x	x						
Meirax -	Garden Hybrid -			x	x								
niveum -	Malay Arch. -					x	x						
Parishii -	Burma -					x	x	x					

		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<i>Dendrobium—cont.</i>													
<i>crumenatum</i>	- Malay Arch.			x									
<i>crystallinum</i>	- Burma			x									
<i>cumulatum</i>	- Moulmein											x	
<i>dalhousieanum</i>	- India			x									
<i>densiflorum</i>	- East Indies			x									
<i>devonianum</i>	- Khasia Mountains			x									
<i>dixanthum</i>	- Moulmein					x							
<i>eburneum</i>	- " "	x											
<i>fimbriatum</i>	- India			x									
— var. <i>oculatum</i>	- Khasia		x										
<i>findlayanum</i>	- Burma		x			x							
<i>fuscatum</i>	- Himalayas						x						
<i>heyneanum</i>	- Deccan								x				
<i>hircoglossum</i>	- Malacca								x				
<i>jamesianum</i>	- Burma					x							
<i>japonicum</i>	- China and Japan				x								
<i>Jenkinsii</i>	- India			x									
<i>kingianum</i>	- Australia			x									
— var. <i>pallidum</i>	- " "		x										
<i>linawianum</i>	- China and Japan		x										
<i>linguaeforme</i> aff.	- N.E. Australia			x						x			
<i>lituiflorum</i>	- East Indies			x									
— var. <i>Freemanni</i> .	- " "			x									
<i>Loddigesii</i>	- South China				x								
<i>luteolum</i>	- Moulmein		x										
<i>Mac Carthiae</i>	- Ceylon				x							x	
<i>macrostachyum</i>	- " "									x			
<i>macrophyllum</i>	- Java					x							
<i>mesochlorum</i>	- India				x								
<i>moschatum</i>	- East Indies				x								
<i>mutabile</i>	- India					x							
<i>nobile</i>	- East Indies	x	x	x									
— var. <i>nobilius</i>	- " "		x	x									
— var. <i>sanderianum</i> .	- " "		x	x									
<i>nodatum</i>	- Moulmein				x								
<i>parcum</i>	- Burma		x										
<i>Parishii</i>	- Moulmein				x								
<i>Phalaenopsis</i>	- Timor									x			

[illegible]

		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<i>Epidendrum</i> — <i>cont.</i>													
— var. <i>megalanthum</i> .	Tropical America				x								
<i>ionosmum</i> -	Demerara -					x							
<i>inversum</i> -	Brazil -								x				
<i>ellipticum</i> -	" -										x		
<i>ledifolium</i> -	Mexico -						x						
<i>nemorale</i> -	" -						x						
<i>odoratissimum</i> -	Brazil -		x										
<i>patens</i> -	Jamaica -							x					
<i>polybulbon</i> -	West Indies	x											
<i>purum</i> -	Colombia -									x			
<i>radiatum</i> -	Mexico -						x						
<i>ramosum</i> -	West Indies										x		
<i>Schomburgkii</i> -	Demerara -							x					
<i>selligerum</i> -	Mexico -												
— var. <i>purpureum</i>	-					x							
<i>variegatum</i> -	Tropical America					x							
<i>venosum</i> -	Mexico -					x							
<i>verrucosum</i> -	West Indies	x											
<i>virgatum</i> -	Mexico -						x						
<i>virens</i> -	Tropical America						x						
<i>vitellinum</i> -	Guatemala												
— var. <i>majus</i>	Mexico -						x						
<i>Wallisii</i> -	New Granada	x	x	x									
<i>Eria</i> :													
<i>convallarioides</i> -	Nepal -						x						
<i>Corneri</i> -	Formosa -								x				
<i>excavata</i> -	Nepal -			x									
<i>flava</i> -	Himalaya -	x	x										
<i>lindleyana</i> -	Ceylon -		x										
<i>obesa</i> -	Burma -							x					
<i>paniculata</i> -	India -				x								
<i>pubescens</i> -	Neilgherries									x			
<i>velutina</i> -	Malacca -								x				
<i>vittata</i> -	India -		x										
<i>Eulophia</i> :													
<i>lurida</i> -	Sierra Leone				x								
<i>Galeandra</i> :													
<i>barbata</i> -	West Indies		x										
<i>Baueri</i> -	Guiana -					x							x

		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Gomeza :													
crispa - -	Brazil - -			x									
planifolia -	Rio Janeiro -								x				
Gongora :													
bufonia - -	Brazil - -												
— var. leucochila	„ - -			x									
galeata - -	Mexico - -								x				
Goodyera :													
discolor - -	East Indies -		x										
japonica - -	Japan - -	x											
procera - -	Tropical Asia -				x								
Grobya :													
Amherstiae -	Brazil - -									x			
galeata - -	„ - -												x
Habenaria :													
militaris - -	Cochin China -									x			
Hexadesmia :													
crurigera - -	Central America -							x					
fasciculata -	Mexico - -					x							
fusiformis -	West Indies -					x							
Houlletia :													
lowiana - -	Colombia - -								x				
Lælia :													
anceps - -	Mexico - -	x											x
autumnalis -	„ - -												
— var. atro-rubens	„ - -										x	x	x
cinnabarina -	Brazil - -												
— var. harpo- phylla.	„ - -		x										
crispa - -	„ - -							x					
dormanniana -	Rio Janeiro -										x		
elegans - -	Brazil - -								x				
majalis - -	Mexico - -					x							
monophylla -	Jamaica - -							x					
lobata - -	South Brazil -				x								
pumila - -	Brazil - -												
— var. dayana -	„ - -									x			
xanthina - -	„ - -							x					
Liparis :													
Bowkeri - -	South-east Africa									x			

			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<i>Liparis—cont.</i>														
<i>cuneilabris</i>	-	Australia	-								×			
<i>disticha</i>	-	Trop. Asia	-							×				
<i>longipes</i>	-	India	-											
— var. <i>spathulata</i> .		"	-									×		
<i>Prainii</i>	-	Assam	-							×				
<i>Lissochilus:</i>														
<i>Krebsii</i>	-	Natal	-				×							
<i>Lockhartia:</i>														
<i>elegans</i>	-	Trinidad	-	×										
<i>Luisia:</i>														
<i>primulina</i>	-	Tenasserim	-					×						
<i>Lycaste:</i>														
<i>aromatica</i>	-	Mexico	-				×							
<i>Barringtoniæ</i>	-	New Granada	-	×										
<i>cochleata</i>	-	Tropical America	-				×							
<i>Deppei</i>	-	Peru	-				×							
<i>dowiana</i>	-	"	-			×								
<i>fulvescens</i>	-	New Granada	-		×									
<i>gigantea</i>	-	" "	-										×	×
(<i>Paphinia</i>) <i>grandis</i> .		" "	-		×									
<i>leucantha</i>	-	Central America	-					×						
(<i>Paphinia</i>) <i>lindeniana</i> .		" "	-							×				
<i>plana</i>	-	Bolivia	-	×										
<i>schilleriana</i>	-	Central America	-		×									
<i>Skinneri</i>	-	Guatemala	-	×	×	×								
<i>xytriophora</i>	-	Ecuador	-								×			
<i>Masdevallia:</i>														
<i>acrochordonia</i>	-	Ecuador	-								×	×	×	
<i>amabilis</i>	-	Colombia	-											
— var. <i>lineata striata</i> .		"	-				×							
<i>anchorifera</i>	-	New Granada	-				×							
<i>Benedicti</i>	-	Colombia	-		×									
<i>bella</i>	-	"	-						×					
<i>campyloglossa</i>	-	New Granada	-					×						
<i>canaliculata</i>	-	"	-						×					
<i>capsularis</i>	-	Colombia	-				×		×					
<i>Carderi</i>	-	New Granada	-				×							

			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<i>Masdevallea—cont.</i>														
<i>tovarensis</i>	-	New Granada	-	x										x
<i>triangularis</i>	-	Colombia	-	x										
<i>triaristella</i>	-	Costa Rica	-				x							
<i>trichæte</i>	-	New Granada	-					x						
<i>tridactylis</i>	-	" "	-				x							
<i>triglochin</i>	-	Ecuador	-					x						
<i>Wallisii</i>	-	New Granada	-							x				
<i>xanthina</i>	-	Colombia	-				x							
<i>Maxillaria:</i>														
<i>aciantha</i>	-	Costa Rica	-				x	x	x					
<i>acutipetala</i>	-	Central America	-			x								
<i>aureo-fulva</i>	-	Brazil	-						x					
<i>crassifolia</i>	-	Colombia	-					x						
<i>cucullata</i>	-	Central America	-								x	x	x	x
<i>callichroma</i>	-	Caracas	-					x						
<i>densa</i>	-	Mexico	-	x										
<i>grandiflora</i>	-	Peru	-								x	x	x	x
<i>lepidota</i>	-	Colombia	-						x					
<i>luteo-alba</i>	-	"	-		x									
<i>meleagris</i>	-	Mexico	-								x	x	x	x
<i>nigrescens</i>	-	New Granada	-								x	x		
<i>picta</i>	-	" "	-										x	x
<i>punctata</i>	-	Brazil	-											x
<i>puncto-striata</i>	-	Guatemala	-								x	x		
<i>porphyrostele</i>	-	South Brazil	-	x										
<i>rufescens</i>	-	Trinidad	-		x									
<i>scabrilinguis</i>	-	Colombia	-				x							
<i>setigera</i>	-	New Granada	-										x	
<i>stachyobiorum</i>	-	Central America	-									x		
<i>tenuifolia</i>	-	Mexico	-				x							
<i>variabilis</i>	-	"	-	x										
— var. <i>lutea</i>	-	"	-	x										
— var. <i>media</i>	-	"	-	x										
<i>venusta</i>	-	New Granada	-					x	x	x				
<i>Wagneri</i>	-	Caracas	-										x	
<i>Megacelinium</i> sp.	-	Lagos	-	x										
<i>Microstylis:</i>														
<i>Rheedi</i>	-	India, Java, &c.	-			x								
<i>Wallichi</i>	-	Moulmein	-				x							

			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Miltonia :														
candida -	-	Brazil -									x			
Clowesii -	-	" -								x	x	x		
cuneata -	-	" -			x						x			
Phalaenopsis -	-	Colombia -						x						
spectabilis -	-	Brazil -					x	x						
— var. moreliana	-	" -							x	x	x			
Roezlii -	-	New Granada -				x								
russelliana -	-	Brazil -												x
veixillaria -	-	Colombia -					x	x	x					
Warscewiczii -	-	Peru -			x									
Mormodes :														
Colossus -	-	Central America -			x									
Mormolyce :														
lineolata -	-	Mexico -					x							
Nephelaphyllum :														
pulchrum -	-	Malay Arch. -										x	x	x
Oberonia :														
tahitensis -	-	Society Islands -											x	x
Octomeria :														
Bauerii -	-	West Indies -			x									
Loddigesii -	-	" -											x	
supra-glauca -	-	Brazil -			x								x	x
Odontoglossum :														
arnottianum -	-	- -										x		
astranthum -	-	Tropical America						x						
Cervantesii -	-	Mexico -		x										
— var. roseum -	-	" -		x										
cirrhosum -	-	Ecuador -		x										
citrosimum -	-	Mexico -				x								
— var. roseum -	-	" -					x							
constrictum -	-	Venezuela -								x				
cordatum -	-	Tropical America					x							
crispum -	-	Colombia -	x	x	x	x	x	x	x	x	x	x	x	x
cristatum -	-	Ecuador -												
— var. cristatellum.	-	U. S. of Colombia				x								
Edwardi -	-	Ecuador -		x										
grande -	-	Guatemala -							x	x	x			
hastilabium -	-	" -					x							

			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<i>Oncidium—cont.</i>														
<i>incurvum</i>	-	Mexico	-	-					x					
<i>isopterum</i>	-	Brazil	-	-					x					
<i>jamesianum</i>	-	"	-	-				x						
<i>janierense</i>	-	Brazil	-	-						x				
<i>jonesianum</i>	-	Paraguay	-	-								x		
<i>lanceanum</i>	-	Surinam	-	-			x							
<i>Limminghii</i>	-	Caracas	-	-				x						
<i>longipes</i>	-	Brazil	-	-				x						
<i>luridum</i>	-	West Indies	-	-	x									
<i>microchilum</i>	-	Guatemala	-	-						x				
<i>micropogon</i>	-	Tropical America	-	-						x				
<i>ornithorhyncum</i>	-	"	"	-							x			
<i>ornithopodum</i>	-	"	"	-			x					x		
<i>obryzatum</i>	-	Peru	-	-	x									
<i>Papilio</i>	-	West Indies	-	-	x	x	x	x	x	x	x			
<i>pelicanum</i>	-	Mexico	-	-						x				
<i>pubes</i>	-	Brazil	-	-	x									
<i>pumilum</i>	-	"	-	-			x							
<i>retemeyerianum</i>	-	"	-	-					x					
<i>sarcodes</i>	-	Brazil	-	-			x							
<i>splendidum</i>	-	Mexico, Guatemala	-	-	x									
<i>tectum</i>	-	Colombia	-	-	x									
<i>tigrinum</i>	-	Mexico	-	-							x	x		
<i>trulliferum</i>	-	Brazil	-	-							x	x		
<i>varicosum</i>	-	"	-	-							x	x		
— var. <i>Rogersii</i>	-	"	-	-										
<i>Orchis:</i>														
<i>foliosa</i>	-	Madeira	-	-		x								
<i>maculata</i>	-	Europe	-	-					x					
<i>mascula</i>	-	"	-	-					x					
<i>Ornithidium:</i>														
<i>album</i>	-	West Indies	-	-							x			
<i>coccineum</i>	-	"	-	-				x						
<i>Sophronitis</i>	-	Colombia	-	-	x	x	x	x	x					
<i>Ornithocephalus:</i>														
<i>grandiflorus</i>	-	Brazil	-	-		x								
<i>Ornithochilus:</i>														
<i>fuscus</i>	-	Burma	-	-				x	x	x				

[illegible]

[illegible]

			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<i>Restrepia</i> — <i>cont.</i>														
striata -	-	Tropical America		x										
<i>Rodriguezia</i> :														
fragrans -	-	Brazil -				x								
secunda -	-	Trinidad -								x				
<i>Saccolabium</i> :														
bellinum -	-	Burma -	x	x										
Blumei -	-	Tropical Asia -					x							
curvifolium -	-	Ceylon -				x								
gemmatum -	-	Khasia Hills -			x									
guttatum -	-	Malay Arch. -				x								
micranthum -	-	India -				x								
paniculatum -	-	Himalayas -							x					
Pèchéi -	-	Moulmein -				x	x	x	x					
<i>Sarcanthus</i> :														
insectifera -	-	-												x
pallidus -	-	India -							x					
pugioniformis -	-	Malay Arch. -									x	x	x	
teretifolius -	-	China -									x			
Williamsoni -	-	Moulmein -							x					
<i>Sarcochilus</i> :														
Berkeleyi -	-	Andamans -				x	x							
luniferus -	-	Burma -	x	x										x
<i>Satyrium</i> :														
coriifolium -	-	South Africa -								x				
Princeps -	-	" "								x				
<i>Saundersia</i> :														
mirabilis -	-	Brazil -				x								
<i>Scuticaria</i> :														
Hadweni -	-	Brazil -							x					
Steelei -	-	British Guiana -						x						x
<i>Sobralia</i> :														
macrantha -	-	Mexico -				x	x	x						
— var. nana -	-	-						x						
sessilis -	-	British Guiana -		x	x	x	x	x	x	x				
virginalis -	-	-						x						
<i>Sophronitis</i> :														
cernua -	-	Brazil -										x	x	x
grandiflora -	-	" -	x									x	x	x
— var. rosea -	-	" -	x										x	x

			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Sophronitis—cont.														
violacea -	-	Brazil -	x											
Spathoglottis:														
Fortunei -	-	Khasia and Sylhet									x			
ixioides -	-	Himalayas -							x					
Vieillardii -	-	Sunda Islands -					x	x	x	x	x	x	x	x
Stanhoepa:														
insignis -	-	Brazil -							x					
jenischiana -	-	Peru -							x					
grandiflora -	-	Trinidad -										x	x	
Ruckeri -	-	Mexico -									x			
platyceras -	-	Colombia -								x				
saccata -	-	Guatemala -						x						
Stelis:														
discolor -	-	Peru -								x				
muscifera -	-	Venezuela -			x									
Stenoglottis:														
fimbriata -	-	South Africa -								x	x	x	x	x
Tetramicra:														
bicolor -	-	Brazil -				x								
Thelasis:														
carinata -	-	Malay Arch. -								x				
Trias:														
picta -	-	Burma -		x										
Trichopilia -	-													
fragrans -	-	Colombia -		x										
— var. nobilis -	-	„ -	x											
galeottiana -	-	Mexico -							x					
laxa -	-	New Granada -												x
hymenantha -	-	West Indies -										x		
tortilis -	-	Mexico -				x								
Trichosma:														
suavis -	-	Khasia Mountains										x		
Trichocentrum:														
fuscum -	-	Mexico -										x	x	
Trigonidium sp.	-	-			x									
Vanda:														
amesiana -	-	Cambodia -												x
Bensoni -	-	Rangoon -								x				

		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<i>Vanda—cont.</i>													
<i>corulea</i> -	Sylhet, India -								x	x	x		
<i>cristata</i> -	Nepal -				x								
<i>insignis</i> -	Timor -								x	x	x	x	
<i>kimballiana</i> -	Tropical Asia -									x	x		
<i>limbata</i> -	Java -					x							
<i>suavis</i> -	" -				x	x							
— var. <i>Veitchii</i> -	" -	x	x										
<i>tricolor</i> -	" -												
— var. <i>insignis</i> -	" -			x	x								
<i>Wightii</i> -	India -				x								
<i>Vanilla:</i>													
<i>planifolia</i> -	Tropical America -			x									
<i>Xylobium:</i>													
<i>corrugatum</i> -	New Granada -	x										x	
<i>elongatum</i> -	Central America -										x		
<i>leontoglossum</i> -	New Granada -	x											
<i>Zygopetalum:</i>													
<i>cerinum</i> -	Central America -						x						
<i>citrinum</i> -	Brazil -						x						
<i>crinitum</i> -	" -			x									
<i>discolor</i> -	Costa Rica -				x								
<i>Gautieri</i> -	Brazil -								x				
<i>brachypetalum</i> -	" -							x					
<i>gramineum</i> -	Popayan -				x								
<i>intermedium</i> -	Brazil -	x	x										
<i>marginatum</i> -	Colombia -										x		
<i>Rollisoni</i> -	Brazil -									x			
<i>stapeloides</i> -	" -						x						
<i>velatum</i> -	Tropical America -									x			
<i>waillesianum</i> -	Brazil -						x					x	
Totals for each month -		85	108	104	104	125	101	87	90	96	108	114	99

CXCIV.—DAMMAR FROM NEW CALEDONIA.

We have for some time had in the Museum of the Royal Gardens specimens of the wood and resin of a tree indigenous to New Caledonia, obtained by Professor Moseley, F.R.S., who communicated them with the following note :—

A gum from New Caledonia, obtained at Canala, on the east side of the island, by Mr. J. Brazier, and given by him to me.

With this is a sample of the wood of the tree from which the gum is collected. An incision made in the bark of the tree produces a copious flow of the gum.

The gum is soluble in alcohol, and burns with a pleasant odour.

Very large quantities of the gum might be readily obtained in the island if it were found suitable for varnish or otherwise.

The wood of the tree is commonly used for building purposes.

The bark and leaf of the tree are said to be like those of a *Dammara*.

H. N. MOSELEY.

We have been unable to get any further light on these specimens. But having recently obtained Sebert's "*Notice sur les bois de la Nouvelle Caledonie*" it seems possible with its aid to clear up the identification. A tree described as *Dammara lanceolata*, Lindley, and occurring "*depuis Genguène jusqu'à la baie du Sud*" (p. 169), agrees in every particular with Professor Moseley's note, while of the other two species of *Dammara* known to occur in New Caledonia, *D. Moorei*, Lindl., only occurs in the north, and *D. ovata*, Lindl., in the south.

It is, however, rather puzzling to find that Lindley had described no species under the name of *D. lanceolata*. Sebert, however, states, that in the descriptive botanical work of his book he was assisted by Pancher, and in the Kew Herbarium we have a specimen of *D. lanceolata* collected in New Caledonia by the latter, and communicated by Mons. Thozet, of Queensland. The species, therefore, if valid, of which we can hardly on the material form an opinion, must be called *D. lanceolata*, Pancher and Sebert. The authors mention that it abounds in resin, the value of which for commercial purposes never seems to have been tested. "The natives," he says, "use it to varnish their pottery."

It will be remembered that the Kauri resin of New Zealand is afforded by *Dammara australis*, Lamb.